

Guidance Element	R2 Position	Discussion
1) TCE short-term response action levels (STRALs) in response to 2011 IRIS toxicity criteria: <ul style="list-style-type: none"> • 2 ug/m³ for residential • 7 ug/m³ for com (10-hr) • 9 ug/m³ for com (8-hr) 	Agree	OEHHA and DTSC toxicologists have informally agreed with the indoor air goals on which the STRALs are based, as has our in-house toxicologist. We are still discussing what action is needed in response to STRAL exceedances (evacuation, notification, more indoor air sampling, better ventilation, or a combination).
2) PCE indoor air screening levels – should be based on more stringent Cal/EPA toxicity factor	Agree	OEHHA has previously advised DTSC and Water Boards to do this. Our 2013 ESLs incorporate the more stringent Cal/EPA toxicity factor.
3) Residential indoor-air sampling – should have multiple sampling rounds including cold weather (and encourage passive samplers)	Partially agree	Not yet addressed by DTSC VI guidance. We agree that indoor-air sampling results exhibit temporal variability, but in most cases 2 rounds of indoor-air sampling provides data over a reasonable range of conditions and avoids excessive disturbance to home owner. We're concerned about QA for the passive samplers; it's hard to rule out indoor sources of VOCs over long sampling periods.
4) Commercial indoor air sampling – should be done with HVAC off	Disagree	Contrary to DTSC VI guidance. In most cases, there are compelling reasons to continuously run HVAC systems, for occupant comfort, making HVAC-off a very atypical situation. In some situations operation of the HVAC system can draw vapors into the building, so HVAC off may not always be most conservative. Sampling during typical operating conditions is most representative.
5) On-property indoor air sampling – should include buildings with podium-parking design or other vapor intrusion mitigation systems (VIMS)	Partially agree	Not yet addressed by DTSC VI guidance. We generally agree that VIMS don't guarantee success, but some VIMS, such as podium parking, are more robust than others and don't need ongoing VI monitoring.
6) Off-property vapor intrusion evaluation – should cover all buildings overlying the 5 ug/l TCE groundwater plume footprint, should include indoor air sampling	Disagree	Our experience with R2 sites is that TCE groundwater concentrations need to be significantly above 5 ug/l to cause vapor intrusion. The 5 ug/l value is based on empirical data from sites that are very different from those in this region. Our ESLs provide a VI screening level of 130 ug/l (residential) and 1,300 ug/l (commercial) – based on a cancer endpoint. Indoor air sampling imposes real costs to residents (stress, uncertainty, and potential property-value impacts) and should be limited to sites where vapor intrusion is likely, based on groundwater and/or soil gas results.